

**Report of RPM Plus Participation  
in the USAID “Malaria Plus up” Meeting  
and Discussion of Opportunities for RPM Plus  
in Malaria and Child Survival Activities in Senegal**

**June 26-29, 2001**

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## Acronyms

ANC	Antenatal clinics
BASICS	Basic Support for Institutionalizing Child Survival
CA	Cooperative Agreement
CDC	Center for Disease Control, Atlanta
CEFOREP	“Centre de Formation et de Recherche en Santé de la Reproduction “
CFA	Unit of currency in Senegal <sup>1</sup>
CMS	Community marketing services
DMM	Drug Management for Malaria
DMCI	Drug Management for Childhood Illness
DPM	Direction de Pharmacie et Médicaments
EDL	Essential Drug List
FDA	Food & Drug Authority
IMCI	Integrated Management of Childhood Illnesses
IPT	Intermittent Presumptive Treatment
ITN	Insecticide treated net
LNCM	“Laboratoire National de Contrôle des Médicaments”
MHFP	Maternal Health and Family Planning
MSH	Management Sciences for Health
NGO	Non Governmental Organization
OMS	“Organisation Mondiale de la Santé”
PAHO	Pan American Health Organization
PCIME	“Prise en Charge Intégré des Maladies de l’Enfant
PNA	“Pharmacie Nationale d’Approvisionnement”
PNLP	“Programme National de Lutte de contre le Paludisme”
RBM	Roll Back Malaria
RPM Plus	Rational Pharmaceutical Management Plus
SNAN	“Service National de l’Alimentation et de la Nutrition”
SNEPS	“Service National de l’Education pour la Santé”
SNSP	“Service National de Santé Publique”
SNSR	“Service National de Santé de la Reproduction”
SP	sulphadoxine-pyrimethamine
SSP	“Soins de Santé Primaires”
USAID	United States Agency for International Development
USPDQI	United States Pharmacopoeia Drug Quality and Information
WARO	West Africa Regional Office (BASICS)
WHO	World Health Organization

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<sup>1</sup> 1 US\$=720 CFA

## **Background**

### Malaria

The Rational Pharmaceutical Management Plus Program (RPM Plus) of Management Sciences for Health (MSH), has received funds from USAID under Strategic Objectives 5 (SO5) to develop strategies to implement malaria policies and to provide technical assistance in drug management issues in malaria in three countries in Africa: Zambia, Uganda and Senegal. Under the former project, RPM developed a malaria drug assessment tool, “Drug Management for Malaria (DMM)”. The tool was field tested this year in South Africa in collaboration with the University of Cape Town, and the South East Africa Combination Antimalarial Trials (SEACAT). The findings from the field test will provide the RPM Plus program additional information that may be beneficial to the Senegal anti-malaria strategies.

### Child Survival

Similarly, RPM plus receives funds through SO3 to develop strategies and provide technical assistance in drug management issues to contribute towards improving child survival. To this aim, also under the former project, a drug management assessment tool was developed to assess the availability and use of drugs used in childhood illnesses. The main childhood illnesses considered are those of the IMCI: malaria, acute respiratory infections and diarrhea. The Drug Management for Childhood illnesses (DMCI) has already been applied in Ecuador, Bolivia, Uganda and Zambia to highlight strengths and weaknesses in the areas of drug availability and use. In September 2001, RPM Plus plans to conduct a regional workshop in Drug Management for Childhood Illness (DMCI) in Senegal for participants from some other francophone countries: Guinea, Niger, Mali and Haiti, in addition to the host country Senegal. During the workshop RPM Plus will introduce the concept and the methodologies of the DMCI assessment tool. Training of national data collectors and a national assessment in Senegal will follow the workshop. This assessment will include an extended module to include a measurement of the availability of antimalarial drugs for use in pregnancy in addition to those typically used in IMCI.

## **Purpose of Trip**

Jane Briggs and Rima Shretta-Chag, Senior Program Associates from RPM Plus traveled to Dakar, Senegal, to attend a meeting organized by the Environmental Health Division (EH) of the Office of Population, Health and Nutrition (G/PHN), USAID. The EH in collaboration with the Ministry of Health in Senegal, the USAID PHN office in Dakar and other USAID funded initiatives and organizations operational in Senegal met in Dakar on the 27<sup>th</sup> and 28<sup>th</sup> June. The goal of the meeting was to discuss the MoH/USAID malaria control strategy and to identify the contribution of the various organizations in the activities outlined in the strategy. The specific purpose for the presence of RPM Plus was to identify potential opportunities for the malaria and child survival activities of RPM Plus to complement the activities of the other organizations in contributing to the MOH/USAID malaria strategy.

## **Scope of Work**

### Common Elements for Malaria and Child Survival:

1. To discuss MoH/USAID malaria strategy
2. To discuss the work plans of three USAID/Senegal CA's
3. To identify potential drug management issues
4. To identify gaps which RPM Plus program can help fill
5. To develop a 5-year strategy and first year work plans for Senegal, with a specific timeline for Year One

### Child Survival Activity

6. Begin planning of the DMCI workshop, planned for September 2001, with BASICS

### General

7. Provide an arrival briefing and /or departure debriefing upon request

## **Activities**

Although the purpose of the trip was to participate in the USAID malaria meeting, as many other meetings as possible in the time available were held with organizations and bodies relevant to the pharmaceutical sector. These will be documented later in this document.

The "Malaria plus up" program consists of USAID funded malaria activities in three African countries; Senegal, Uganda and Zambia in recognition of the magnitude of the malaria problem in Africa. The two-day USAID meeting began with presentations from USAID and the four Senegal USAID-funded initiatives: BASICS II (Senegal), MSH- Maternal Health and Family Planning Project, Ademas and Netmark, outlining their background and scope of work for malaria in Senegal. This was followed by other potential partners and collaborators: United States Pharmacopoeia Drug Quality and Information (USPDQI) Program, RPM Plus and University of Dakar.

The objectives of the meeting were:

- To reach a consensus on the long-range (5 year) goals of the USAID malaria "plus up" program

- To validate year one activities for each implementing agency in the program “Malaria plus-up”
- To establish benchmarks for years 2,3 and 4 showing the logical progression towards the achievements of 5 year goals
- Identify gaps in expertise among current partners and establish outlines for technical assistance with clear roles and responsibilities to ensure close collaboration

## **1. Senegal MoH/USAID Malaria Strategy**

The current recommended treatment for malaria in Senegal is chloroquine with sulphadoxine-pyrimethamine (SP) as the second-line treatment. Clinical failures of 17% have been recorded in Dakar and other areas in Senegal. Despite chloroquine being relatively cheap, access to it not optimal.

Each “plus up” country, including Senegal has been allocated CFA 26 billion (USD 37 million) over 5 years (2000-2005) for malaria activities at community level, within the health care system as a whole, as well as including operational research. To this end, previous meetings held in Dakar between USAID and MoH identified portions of the “Programme National de la Lutte contre le Paludisme” (PNLP) strategy which the USAID/MoH “Malaria plus up” program will address. The “Malaria plus up” program has decided to focus its activities at four levels which will form the structure of the combined efforts:

1. Household recognition and response
2. Appropriate treatment
3. Antenatal care and malaria in pregnancy
4. Insecticide Treated Nets (ITNs)

The MoH/PNLP has suggested that 26% of the total USAID Senegal malaria plus up funds be allocated for activities at the district level, (comprising health care delivery in the public health care system managed by the district health team) as opposed to regional or central level specific malaria activities.

The “Malaria plus up” program will work with USAID/Senegal’s partners; MoH/PNLP, Roll Back Malaria (WHO/RBM), and USAID/Senegal’s local implementing agencies, BASICS II, Ademas, MSH and Netmark together with additional technical resources from Washington, as appropriate from RPM Plus and USP. The “Malaria plus up” activities are expected to complement existing activities already being carried out at the district level. The focus of the work is to reduce mortality in concert with the goals of the Abuja declaration.

## 2. The Work Plans of the Senegal/USAID-funded Initiatives

### *BASICS II:- Aboubacry Thiam*

BASICS II in Senegal is involved in IMCI, peri and neonatal health and immunization. The Mission strategy is a gradual expansion to cover 29 districts by 2004 and BASICS II follows that strategy. Malaria “plus up” activities are focused on strengthening the existing IMCI and community-IMCI efforts.

### *MSH:- Ousmane Faye*

The MSH Maternal Health and Family Planning Project is in charge of implementing Reproductive health/Family Planning component of the bilateral program and in the “Malaria plus up” program has been identified as the lead agency to implement activities concerned with malaria in pregnancy and the delivery of antenatal care services.

### *Ademas:- Seynabou Mbengue*

Ademas is the local Senegal partner of Community Marketing Services (CMS) and is involved in commercial marketing activities of reproductive health commodities (currently only condoms although projected to cover oral and injectable contraceptives in the near future) in the private sector. Ademas suggest their potential involvement in the “Malaria plus up” program could be developing appropriate behavior change messages to improve household prevention and treatment of malaria.

### *Netmark:- David McGuire*

NetMark is a USAID-funded initiative to promote the use of ITNs to prevent malaria in sub-Saharan Africa through the formation of public-private partnerships. Managed and carried out by the Academy for Educational Development (AED), the NetMark partnership includes, in addition to AED, the U.S. government, The Malaria Consortium of the London and Liverpool Schools of Hygiene and Tropical Medicine, The Johns Hopkins School of Hygiene and Public Health, and Group Africa. The primary goal of NetMark is to develop a sustainable market for ITNs, in target countries in Africa. The strategy is based on the “trickle down” approach whereby, the top end of the socio-economic pyramid is able to access their nets from the private sector and limited public sector (Ministry of Health) resources may be used to provide nets for the bottom 2/3 segments of the socio-economic groups.

### Others

### *USPDQI (United States Pharmacopoeia Drug Quality and Information):- Nancy Blum*

USP develops standards for pharmaceutical manufacture, which are enforced by the United States Food and Drugs Authority (FDA). The USPDQI is a USAID funded cooperative agreement (CA) which deals with drug quality and information issues. In Asia, USPDQI is involved in using routine sentinel surveillance sites for drug quality testing. Personnel are trained to collect drug samples and test them for quality.



*RPM Plus:- Rima Shretta-Chag and Jane Briggs*

RPM Plus and its predecessor RPM have received funding from USAID since 1998 to support pharmaceutical activities in infectious diseases. Its expertise lies in evaluating drug management as described by the drug management cycle; selection, procurement, distribution and use and developing strategies and providing technical assistance to improve any weaknesses identified. RPM developed an indicator based drug management assessment tool for malaria (DMM) and for childhood illness (DMCI) to assess the availability and use of antimalarial and other drugs. Much of RPM and RPM Plus work in malaria has been at the macro level, in discussions with WHO/RBM, USAID, CDC and others in incorporating drug management issues for malaria. RPM plus' relevance to malaria is at the policy level, to ensure availability through the public and private sectors, to encourage rational use and to develop interventions to increase access to antimalarials.

*University of Dakar (UCAD):- Prof. Oumar Gaye*

The department of parasitology at the medical school carries out research in malaria and malaria epidemiology. UCAD is also involved in the monitoring of resistance in the eight sentinel sites in Senegal. Monitoring occurs yearly in close collaboration with the National Malaria Control Program (PNLP). UCAD is also investigating the use of diagnostic methods for malaria, which are feasible to be reinforced at the district and field levels. In the south of Senegal, evaluation studies for combination therapy are being carried out. Two combinations are being investigated, artesunate/mefloquine and Coartem® (artemether/lumefantrine).

**3. Potential Drug Management Issues**

The two levels of the “Malaria plus up” program activities with potential drug management components were 1) appropriate treatment and 2) antenatal care and malaria in pregnancy. From the USAID meeting, no detailed discussions were possible due to time restrictions to focus on identifying what the drug management issues might be. However in broad terms it is felt that there are problems of drug availability and use of malaria and other drugs. This will be assessed and verified in the upcoming DMCI assessment.

Although there was limited time in the trip to wholly achieve all of the points in the scope of work and fully evaluate all potential drug management issues which would ordinarily involve a full pharmaceutical assessment, an attempt was made in the few days spent in country to discover some of the potential issues. Some meetings were held with key people within the “Pharmacie National d’Approvisionnement” (see further in the document) and as a result, the following few areas could be considered as potential drug management issues: Quantification and store management at health facility and district store level was recognized as a problem by the central level staff, as observed through bizarre order quantities. Although there is an essential drugs list and a set of standard treatment guidelines for common diseases, there seem to be weaknesses in the selection process as it was described to be arbitrarily conducted and hardly based on evidence. Another potential drug management issue is that of quality control, as it

appears that the national control laboratory have limited capacity. Clearly in order to fully understand the potential drug management issues a more thorough assessment will be needed. (A more detailed account of the meetings held at the PNA is in Annex 1)

#### **4. Gaps which RPM Plus Program Can Help Fill**

As a result of break-out sessions and discussions in the USAID meeting, the two levels of the “Malaria plus up” program in which it was suggested that RPM Plus could offer its expertise in drug management are within malaria in pregnancy and appropriate treatment. The reasons for this and the potential involvement over the first year, which were the main results of the discussions, is described below. Due to the time limits on the workshop, it was not possible within the discussion groups to further develop activities in more specific detail, thus it will be necessary to conduct further meetings with the relevant partners to clarify the next steps and the responsibilities of the different organizations involved.

##### Malaria in Pregnancy

It is estimated that over 80% of all pregnant women in Senegal visit the Ante Natal Clinic at least once during their term. The antenatal care system represents an opportunity for effective intervention to target malaria in pregnancy. This could be through strengthening existing systems and channels of distribution of antimalarial drugs for prevention and treatment, an area in which RPM Plus can offer its skills in drug management. Currently, pregnant women receive no antimalarials to prevent malaria during pregnancy, however, the PNLP are receptive to the idea of using SP for IPT through the existing antenatal care system. The MSH Maternal Health and Family Planning project will be the lead agency in the activities of “Malaria plus up” in the area of malaria in pregnancy due to its work in reproductive health in Senegal.

It was determined that RPM Plus could assist the Maternal Health and Family Planning project and other partners listed in Annex 2 in the following areas, although the specific details of implementation have yet to be developed.

- Conducting an evaluation of current practices regarding malaria in pregnancy with a particular focus on Intermittent Presumptive Treatment (IPT) and its feasibility
- Developing a minimum antenatal package for malaria in pregnancy
- Assessing the available information on barriers to effective malaria prevention and treatment through antenatal services. Assessing the distribution system for antimalarials through the ANC and developing interventions to remove these barriers
- Conducting a literature review on the use of SP for IPT to gather evidence for advocacy for policy change
- Assessing the distribution system to integrating SP for IPT through antenatal clinics

- Reviewing the current guidelines for the management of malaria in pregnancy to include SP for IPT
- Designing a pilot study to assess private sector use of SP for IPT and developing interventions to improve use

The table in Annex 2: Malaria in pregnancy, details all the proposed areas of intervention and the probable partners, as previously described the implementation and definition of activities are still to be clarified.

### Appropriate Treatment

The discussion group of the “Malaria plus up” workshop that focused on appropriate treatment clarified that there are different components: treatment in the formal public sector (at health centers or health posts), in the formal private sector (e.g. clinics and pharmacies) as well as in the informal private sector (e.g. itinerant drug vendors) which is more difficult to evaluate than the other sectors. Appropriate treatment is affected by the drug availability and prescribing and counseling practices of each of these sectors. The other important component of appropriate treatment is household recognition, response and treatment, use of therapies and compliance.

The RPM Plus DMCI tool can be used to assess the availability of childhood illness drugs in both the public and private sector and can be used to assess availability of antimalarial drugs for pregnant women with an added module. As a result of the discussions, a variety of potential activities for the first year were identified and these are listed in Annex 2: Appropriate treatment with the suggested partners in the activities. BASICS II will function as the lead agency for these activities in Senegal. As stated above in the malaria in pregnancy group, the proposed activities are somewhat vague due to limited time in the workshop to develop them further and clarify the various roles and responsibilities. This next step will be coordinated by BASICS. In general it was proposed by the group that there is a need for RPM Plus assistance in the following areas:

- Conducting an assessment at community level of care seeking behavior, treatment practices and drug use at home in order to identify areas of potential intervention to improve drug management in the community
- Assessing the availability of drugs in the public and private sector by applying the DMCI tool. There is a suggestion to extend this to include an assessment of the availability of drugs in ANC to inform the malaria in pregnancy group, which has to be explored further.
- Formulating recommendations and develop appropriate interventions to improve drug availability in both the public and private sector and develop plans for implementation
- Develop and test interventions to improve prescription and counseling practices in the public sector and of private practitioners where found necessary as a result of the DMCI evaluation.

The table in Annex 2: Appropriate treatment, details all the proposed areas of intervention and the probable partners, awaiting further clarification of the implementation process and definition

of activities. It is recognized that the activity “developing appropriate interventions” is not very specific, but it is emphasized that the details of the type of intervention will not be known until the results of the DMCI have been disseminated and discussed by appropriate stakeholders. All the above listed activities are planned for the first year of “Malaria plus up” in Senegal. It is hoped that early in the second year, some interventions may be targeted at improving the informal sector of health care providers, although this will need to be carefully evaluated.

## **5. Develop a 5-year Strategy and First Year Work Plans for Senegal, with a Specific Timeline for Year One**

The objectives of the five-year plan used for the development of the five year plan are divided into the four levels of activities and are listed below:

1. Household recognition and response
  - Caretakers of children in households at high risk of mortality from malaria are increasingly aware of appropriate response to fever in young children
  - Tested and proven information and behavior change messages are being used by NGOs and public health personnel in rural areas.
2. Appropriate treatment
  - National campaigns to increase awareness of dosage and quality issues have been designed and tested. Public awareness of dosages and quality brands is increasing, especially in rural areas.
  - Drug quality and efficacy monitoring systems are in place and functioning effectively at the national level. Regular public reports are being issued on drug quality and drug efficacy by appropriate national regulatory bodies.
  - Private sector drug providers are increasingly giving appropriate advice on dosages and quality brand drugs to customers; public sector providers are consistently giving clear and appropriate advice on dosages to caretakers of young children.
3. Antenatal care/malaria in pregnancy
  - Antenatal care services routinely include Intermittent Presumptive Therapy, IPT is included in national ANC program guidelines and pregnant women know that IPT should be part of the ANC service.
  - ITN promotion and subsidized distribution is routinely included in rural ante-natal services.
  - Promotional campaigns for IPT and ITN use specifically targeted to young women have been tested and adopted by MoH, NGOs and other donors.
4. Insecticide treated nets
  - ITNs are widely available in rural shops.
  - Re-treatment of nets is being actively promoted, re-treatment materials and information are widely available in rural areas.

- At least two methods of subsidized distribution of ITNs targeted to vulnerable populations have been tested. Results are widely disseminated and appropriate implementation is taking place, with support of other donors as well as USAID.

A broad outline of activities to achieve the stated five-year objectives were developed by working groups, the results of which are presented in Annex 3 in French, which was the working language of the workshop. A brief summary will be presented below. The proposed activities to be carried out during the first year together with the implementing agencies and partners were discussed and are presented in Annex 2.

### Brief Summary of 5-Year Plan

This includes interventions by all the partners although these are not specified for the whole 5 year plan

#### 1. Household Recognition and Response

The 1<sup>st</sup> year consists of activities of document review of knowledge, attitude and practice of malaria and development of IEC materials to disseminate the message about prevention and malaria management practices. Adaptation, development and use of these messages will continue through four years. Indicators will be developed and used to monitor the IEC activities. A mid course and final monitoring of outputs and outcomes will take place

#### 2. Appropriate treatment

Under the aspect of community drug management, in the first year, after a literature review of community based distribution, a community based distribution system will be tested and its adaptation and revision will continue through to the fifth year. As a result of a study of health care seeking behavior and home drug use, messages and interventions for the community will be developed to improve the way drugs are used at home; this will be started at the end of the first year and continued through the fifth year. After an evaluation in the first year of the prescribing practices of public, private and informal private sector providers, interventions will be developed, tested and applied from end of year one and continued through the fifth year. At the same time from the first year onwards, continued public sector staff training on IMCI will take place and its integration into schools. Monitoring of *plasmodium* resistance will start in the first year and continue through to the fifth year. Initial steps to strengthen drug quality testing and monitoring will start in the first year. In the second year, staff will be trained, results will be disseminated on the quality tests and in the third year, a community alert system will be initiated for poor quality products. These activities will continue on into the fifth year. Supervision of activities and monitoring performance will occur at points through the five-year period.

#### 3. Antenatal Care and Malaria in Pregnancy

Evaluation of the feasibility of availability IPT and ITNs in ANC both private and public will occur in year 1 and interventions developed accordingly in the following years, to assure

availability. Tax relief on ITNs will be explored in the first year. The quality of curative care offered to pregnant women will be evaluated and training of providers and monitoring will occur thereafter. Revision of management guidelines may be required which will start in the first-year. Media will be used to spread messages about prevention in pregnancy. The use of IPT will be tested in a pilot area in year 1 and spread over following years if successful. All these activities started in year will continue to be monitored revised as appropriate and continued through the five years.

#### 4. Insecticide Treated Nets (ITNs)

Research into targeting poor rural and at risk populations will be carried out in the first year. Through collaboration with private and public sectors, from the first year channels of distribution will be established and availability monitored. Points of sale of ITNs will be increased over the five-year period. Promotion of demand for ITNs is required, so community messages will be disseminated and marketing techniques employed from the first year and continued through to the fifth year with refinement of approaches and adaptation of strategies as appropriate.

The role of RPM plus in the whole five-year plan is unclear at this stage as many of the interventions will be determined through evaluation and research. With a view on the first year, in the area of appropriate treatment, there is a clear involvement of RPM plus in “Malaria plus up” with the implementation of DMCI, with an accompanying study of drugs for malaria in pregnancy and a community drug use assessment. Following that assistance in the development of appropriate interventions to improve drug availability and use, responding to weaknesses identified in the DMCI and technical assistance is assured by RPM plus although it is unclear as yet in what areas that will be. However, within the malaria in pregnancy, RPM plus need to undergo more planning discussions with the Maternal Health and Family planning project to clarify the activities in the first year.

The USAID workshop came to an end at this stage.

The final two parts of this section of the report deal with the child survival activity of preparation for the DMCI workshop and the USAID debriefing by RPM Plus staff prior to departure as specified in the scope of work.

#### **6. Coordinate the DMCI Workshop, Planned for September 2001, with BASICS**

Two meetings were held with staff from BASICS WARO and BASICS Senegal. The participating countries were confirmed for the regional workshop (Senegal, Guinea, Mali, Niger, Haiti), which is intended as an introduction to DMCI for these countries that they will be able to take it back to their own countries and apply at a later date with assistance from RPM plus. The regional workshop will be followed by a training session for data collectors in preparation for a national Senegal DMCI survey. Activities were planned to inform and gain the approval of the Ministry of Health. In preparation for the survey, provisional sampling sites were discussed. Agreement was reached that as many types of private facilities/providers as possible would be

included (including the informal private sector, if feasible). It was decided that a survey coordinator will be recruited to coordinate activities before and during the training and survey. A task list of preparations was drawn up and it was decided that further arrangements will be conducted by phone and mail between RPM plus and BASICS in both Washington and Dakar (A detailed account of these meetings is in Annex 4).

## **7. Departure debriefing with USAID - Felix Awantang, Matar Camara, Sara Holtz**

A brief meeting was held to outline the RPM plus proposed activities in the fields of malaria and child survival as a result of the USAID “Malaria plus up” meeting and other previous planning meetings. There is a need for a better understanding of the pharmaceutical sector in Senegal as well a more precise contribution of RPM Plus as well as other partners identified in the activities under malaria in pregnancy and appropriate treatment. A potential joint USP and RPM Plus trip was discussed for September 2001 to meet with collaborators to identify roles and responsibilities for each partner in each activity. The USAID mission offered to assist during the follow up visit by planning meetings with the relevant partners.

USAID was informed of the RPM Plus plans to conduct with BASICS the DMCI regional workshop and national survey in September, the planning of which is underway. The overlap in this activity between childhood disease and malaria was emphasized. As a result of the findings of this assessment RPM Plus propose to provide technical assistance to strengthen weak areas of availability and use of drugs in the public and private sector. The mechanisms and interventions to do this will be determined in a policy options workshop planned with BASICS for December. The planned development of a community tool to investigate drug use at community level was also discussed.

## **Other Meetings Held**

### PNA

At a meeting with staff at the “Pharmacie National d’Approvisionnement”, an overview was given of the pharmaceutical supply and distribution system. This is noted in Annex 1. The main problems identified were that of quantification at health facility level and lack of capacity for drug quality monitoring.

### Aventis

Aventis is the manufacturer in country of Nivaquine® (chloroquine) and a meeting was held with them to gather information on the pharmaceutical sector from their perspective and their activities in Senegal. The relative importance and size of the private sector was stressed in the interview as well as the fact that there is low resistance to chloroquine (although this was unsubstantiated) (The meeting is outlined in Annex 5).

### WHO/RBM Malaria Advisor:- Dr Bakary Sambou

A meeting was held with the Roll Back Malaria Advisor to Senegal to introduce RPM Plus and to discuss the Roll Back Malaria Program. The meeting also provided some background to the health care infrastructure in Senegal in the context of decentralization, which began in 1996.

In Senegal malaria accounts for 35% of all outpatient attendances. There are eight sentinel sites for monitoring antimalarial resistance in Senegal and clinical resistance varies from 6% (Zinganchor) to 17% (Kaolack and Dakar). Resistance is monitored every two years. SP has not been tested yet as chloroquine is still effective and there have been no reports of failure to SP.

Senegal organized the first consensus meeting to adopt the RBM strategy in July 1999. A number of RBM actions have taken place, including the involvement of health regions and operational levels, a consensus to form a close collaboration with IMCI and the development of a five-year strategic plan of RBM with consensus among partners. WHO/RBM are evaluating SP for IPT in 2-3 USAID/MSH districts.

More details are outlined in Annex 6.

### MSH/Senegal

Within the Maternal Health and Family Planning project (MHFP) of MSH, the supply of contraceptives and reproductive health commodities is to be integrated into the national supply network through the PNA system. It is currently being tested in 2 of 10 regions in the country and an evaluation will take place later this year to determine the feasibility of integrating the supply in all regions. Attached to the integration of supplies is the initiation of cost recovery of contraceptives. This will also be evaluated, a baseline was carried out in early 2000 (copy available). With a common interest in improving the supply and availability of drugs and commodities, there is potential for RPM Plus to collaborate with MSH/Senegal in drug management issues, especially if it is found that the national system needs strengthening. The specific nature of this collaboration has not been identified as it is dependent on the weaknesses found in the distribution system. There is a possibility of technical assistance being offered to PNA through RPM plus and MHFP, each from their own funding but coordinating efforts. The exact details of this can be determined at a later date in further meetings. (This meeting is described further in Annex 7).

## **Next Steps**

### **Immediate Follow-up Activities**

1. Discussions with BASICS II and MSH Senegal are required to establish the roles and responsibilities of each partner identified within the specific year-1 activities.
2. Follow-up in Senegal is required to:



- Define exactly how RPM Plus can contribute to the defined activities. A potential time period for this follow up visit is September 2001.
- Conduct an overview of the pharmaceutical sector of Senegal to be better placed to discuss potential interventions although it is felt that much of the information required can be gathered in the DMCI assessment planned for September. Any information felt to be missing can be concurrently gathered through key informant interviews

In addition, preparation for the DMCI survey will be undertaken in coordination with BASICS and MoH,

### **Agreement or Understandings with Counterparts**

RPM Plus has a valuable role to play in drug management issues for malaria and to contribute to the gaps identified in the planned activities. The main areas in which RPM Plus can play a role is in providing technical assistance to MHFP project of MSH in improving the management of malaria in pregnancy and in the area of appropriate treatment in collaboration with BASICS, through identification of barriers to availability of antimalarials for IMCI and malaria in pregnancy and developing appropriate interventions. RPM Plus is committed to conducting the DMCI workshops and survey with BASICS and will provide technical assistance where appropriate to implement appropriate interventions in collaboration with BASICS and MHFP Project of MSH. RPM Plus will share with BASICS the progress on the development of the community drug use tool and if possible apply it in Senegal.

### **Constraints and Challenges**

Although there are potential coordination problems with our collaborating partners, as they are based in country and RPM plus is in Washington, DC, with clear initial planning, this problem should be minimal. It is necessary also to clarify the needs for and roles of RPM plus in specific terms in order to facilitate this process further.

The informal private sector of health care providers appears particularly strong and empowered by a religious group. To what extent this sector can be evaluated for drug use practice and targeted by interventions is unknown.

## **Annex 1.**

### **Meeting at Pharmacie Nationale d'Approvisionnement (PNA)**

Mr Papa Ibrahim Ndao ( Director of Administration and Finance)  
and Mme Ndao (Responsible for the store)

In these meetings general information was gathered informally about the pharmaceutical supply and distribution system.

The PNA distribution system provides drugs to the public health sector as well as to the army and police health services (and churches and NGOs with authorization from the DPM ("Direction de Pharmacie et Medicaments")). The possibility of the PNA providing drugs to the private sector is being investigated at present.

### **Selection**

There is an Essential Drug List (EDL) but it was unavailable as it is being revised, it is updated on a periodic basis (every 2 years) by a commission, coordinated by the DPM. The process of revision is dependent on prescribers proposing the products they wish to use and the decision to include or not seems to be made on the basis of demand and needs; no study of cost-effectiveness, or other evidence is made. There are Standard Treatment Guidelines for selected diseases and this is linked to the EDL. There is also a National Drug Policy. Copies of these documents may be obtained through the DPM.

### **Procurement & Tender**

Procurement is done by tender every two years according to the essential drug list. If an increased quantity of an item on the tender is needed during the two-year period, the supplier can supply up to a maximum of a 50% increase at the tender price. In general, 80-90% of the needs are provided for through the tender. The tender is an open tender (including national and international suppliers). Suppliers have to provide a technical and administrative file for the drug they want to sell, products must have a visa to sell the product in their own country. If a reasonably large quantity of drugs is required during the two years, in between open tenders, a closed tender is carried out inviting twenty-three pre-selected suppliers.

The majority of suppliers are in Europe, Aventis and Parke-Davis are the only two local manufacturers and some drugs come from China and India. The majority of drugs stocked in PNA are generic (about 90%). There are about 600 products stocked in PNA, including gauze etc, of these about 350 are drugs.

### **Quantification**

The quantities to procure are calculated on the basis of figures from the previous three years of sales, in addition the hospitals predict their requirements, and allowances are made for stock outs and slow moving items. No data on consumption from the district stores or health facilities is used or available at central level. There is little information in fact in existence at these levels as

there has been a general data strike for five years, such that no information has been recorded at health facility level. From this, an estimate of quantities required is made, using a software package called “Saari”, pharmacists are brought in for the field to discuss.

The PNA recognized that there was a problem at district level in placing orders, and recognizing generic names of drugs, as many duplicate items were ordered. In response to this a document was released (catalogue 1999/2000) to give the brand and generic names to avoid duplication. Also due to problems noted in quantification, about 2 months ago, training was given to district store managers from all districts for 2 days. A pre and post-test demonstrated increased knowledge but no evaluation in the field has happened. (curriculum of training obtained).

### **Product Quality and Regulatory issues**

The procedures for assuring product quality are unclear as this is carried out by the “Laboratoire Nationale de Contrôle des Médicaments”. It was reported that the laboratory samples drugs on arrival for quality. It is unclear how many and what kinds of tests are carried out, but the sampling is proportional to the staffing level at the laboratory. This information will have to be gathered from the laboratory as well as details of the failure rate and actions taken.

There is an “Association de Centraux d’Achats” (association of CMS) in the region, which shares information on poor quality drugs and suppliers between countries.

In terms of controlling regulatory issues, the DPM is responsible for inspection of facilities. At present there are 6 inspectors for both private and public facilities, although more are being trained in Morocco.

### **Distribution**

The PNA supplies drugs by transfer to the five regional “Pharmaceuties Regionales d’Approvisionnement (PRA). These deliveries are made by truck belonging to the PNA and they are in response to a request from the PRA, not automatic, in some cases this happens every month, in others every week depending on turnover and storage space at the PRA. Every PRA has a system of computer and stock cards to track stock. The district depots purchase at the PRA and supply the health centers and health posts. The more peripheral health facilities (cases de santé) all purchase from the health centers. Hospitals can go to the nearest district depot. The PRA can only supply more peripheral units if the request is authorized by the district medical officer.

### **Finances**

The World Bank/EU/French cooperation have provided technical assistance and drugs for the last five years. There is a French expatriate at the PNA but the drug supply has ceased. Some staff of PNA are recruited and paid directly by PNA, others are seconded and paid by the MoH. In the past the MoH fixed the drug price mark-ups at a total of no more than 50% at all levels, {e.g PNA can sell to the district with 20% added on, the district can add 10% to sell to the health centers and they can add 10% to sell peripherally. This is a total of 40%, which is under the limit of 50%}. It was reported some drugs are sold with no or little mark-up, eg anti-malarials, anti-

retrovirals. Whether this practice is implemented in actual fact is unknown. TB drugs and vaccines are program commodities and are distributed for free. The prices in the private sector distributors/outlets are higher, which is why wholesalers e.g. Laborex want to purchase drugs from PNA.

According to the key informants at PNA, in terms of the national market of pharmaceuticals, in business terms, the PNA accounts for about 15%, but in volume terms about 60%. There are only three wholesalers in the country who supply the “officines” (pharmacies) and private outlets.

For more specific information on the number of pharmacies, legal issues, inspection etc., the DPM must be visited (Director – Professor Mamadou Ketié Badiane tel 822 4470). For quality testing issues, the lab must be visited (Director - Prof Mounirou Cissé).

## Annex 2: 1-Year Plan for Working Groups: Malaria in Pregnancy

Activity	Partners
<b>1. Offer quality service</b>	
Document review	MSH RPM Plus IRD (Orstom) Institut Pasteur UCAD ISED PNLP
Situational Analysis of prevention and management of malaria in pregnant women	MSH SNSR PNLP RPM Plus CEFOREP
Advocacy and introduction of COPE <sup>2</sup> in all services	MSH SNSR PNLP
Investigate delivering IPT through the private sector	MSH
Develop a minimum packet of antenatal services for malaria for pregnant women.	MSH SNSR CEFOREP CGO BASICS II RPM Plus PNLP
Identify the barriers to effective antenatal services	MSH SNSR PNLP CGO CEFOREP OMS RPM Plus
Revise the norms and protocols for delivery (integrating new data)	MSH SNSR PNLP CGO CEFOREP OMS RPM Plus
Disseminate the new protocols	MSH SNSR
Train the providers on the new norms and protocols	MSH SNSR PNLP RPM Plus
Train community workers and traditional birth attendants	MSH

<sup>2</sup> Ensure quality of antenatal clinic encounter

Activity	Partners
	SNSR PNLP
Evaluate the efficacy of the sensitization campaigns	MSH PNLP SNSR SNEPS
Pilot the training in the private sector in the use of SP	MSH RPM Plus SNSR PNLP
<b>2. Drug Policy</b>	
Literature review of SP in ANC	MSH RPM Plus IRD (Orstom) Institut Pasteur UCAD ISED PNLP
Test the use of SP in sentinel sites	MSH UCAD PNLP SNSR RPM Plus
Integrate prescribing IPT to pregnant women.	MSH PNLP SNSR RPM Plus CGO PNA
Evaluate the supply of IPT to the ANCs from the district stores	MSH SNSR PNLP PNA
<b>3. ITNs</b>	
Evaluate the possibility of distributing ITNs through ANC	MSH ADEMAS NETMARK PNLP SNSR
Integrate provision of ITNs to each pregnant woman for the first antenatal consultation	MSH PNLP SNSR NETMARK ADEMAS
Investigate distribution of ITNs to make them more accessible to pregnant women.	MSH SNSR PNLP ADEMAS

## 1-Year Plans for Working Groups: Appropriate Treatment

Component	Activity	Partners
Drug quality	<p>Review available data and collect additional baseline data. Share results with Steering Committee.</p> <p>Develop plan for routine drug monitoring. Identify reliable source of testing materials.</p>	<p>USPDQI, LNC, DPM</p> <p>USPDQI, LNC, UDAC</p>
Surveillance of resistance	Develop and implement plan to improve adequate surveillance of resistance patterns.	UDAC, CDC
Community and home treatment	<p>Care seeking and home treatment situation analysis, review of community based distribution experiences.</p> <p>Advocacy to revise existing regulations on treatment at different levels.</p> <p>Develop and test community based distribution in xx districts.</p> <p>Develop messages to improve prompt treatment at home. Test message in xx districts.</p>	<p>BASICS, RPMPlus</p> <p>???, DPM</p> <p>BASICS</p> <p>BASICS, CHANGE, ADEMAS</p>
Increased availability of drugs	<p>Assess availability in public and private sector. (DMCI)</p> <p>Formulate recommendations for improvement in public sector. Develop plan for improvement.</p> <p>Initiate development of intervention to improve availability in private sector. Test (Y2) intervention in xx districts.</p>	<p>BASICS RPMPlus, PNA, DPM</p> <p>BASICS, RPMPlus, PNA, DPM</p> <p>PlusBASICS, RPMPlus, PNA, DPM</p>
Improved prescription and counseling practices	<p>Assess present prescription and counseling practices (public, private formal and informal).</p> <p>Implement PCIME in public sector facilities. Apply LAC experiences of short PCIME courses in xx districts.</p> <p>Develop and test interventions to improve prescription and counseling practices of private practitioners in xx districts.</p> <p>Develop interventions to influence informal private sector. Test in xx districts (year 2)</p>	<p>BASICS, RPM Plus, PNA, DPM</p> <p>BASICS</p> <p>BASICS, SARA, RPMPlus, USPDQI</p> <p>BASICS, SARA, RPMPlus</p>

Component	Activity	Partners
Severe cases	Improved case management at community level through referral system  Improved case management at health facility level using IMCI	BASICS



## Annex 3.

## Plan de Travail pour le Sénégal –

Malaria Plus Up: Vue d'ensemble pour les cinq ans à venir

## IR 1: Réconnaissance des signes et réponse précoce et approprié à la maladie

➔	Project Year 1 ➔	Project Year 2 ➔	Project Year 3 ➔	Project Year 4 ➔	Project Year 5
COMPOSANTE 1 : MENAGE	<p>ANALYSE SITUATIONNELLE</p> <ul style="list-style-type: none"> <li>- Revue documentaire sur les croyances, attitudes et pratiques sur le Palu (données anthropologique)</li> <li>- Recensement des outils IEC/manuels de formation</li> </ul> <p>PLAIDOYER</p> <p>CONCEPTION ET ELABORATION D OUTILS</p> <ul style="list-style-type: none"> <li>- Elaborer et tester le guide de formation</li> <li>- Multiplier et vulgariser le guide de P.E.C dans le menage (1-2)</li> <li>- Concevoir/tester/Diffuser des messages sur P.E.C à domicile</li> <li>- Développer un système d'information communautaire</li> <li>- Développer et tester des indicateurs de monitoring et S.I à base communautaire</li> <li>- Adapter le guide P.E.C à domicile dans</li> </ul>	<p>CONCEPTION ET ELABORATION D OUTILS</p> <ul style="list-style-type: none"> <li>- Elaborer et diffuser des messages au niveau communautaire sur la prévention et la prise en charge en fonction des résultats de la première année</li> <li>- Continuer de multiplier et vulgariser le guide de P.E.C dans le menage</li> <li>- Continuer de développer et tester des indicateurs de monitoring et S.I à base communautaire</li> <li>- Adapter le guide P.E.C à domicile dans les langues nationales</li> </ul>	<p>EVALUATION A MI-PARCOURS</p> <p>CONCEPTION ET ELABORATION D OUTILS</p> <ul style="list-style-type: none"> <li>- Continuer d'élaborer et diffuser des messages en charge en fonction des résultats de l'année précédente</li> </ul> <p>- Adapter le guide PEC à domicile dans les langues nationales</p>	<p>CONCEPTION ET ELABORATION D OUTILS</p> <ul style="list-style-type: none"> <li>- Continuer d'élaborer et diffuser des messages en charge en fonction des résultats de l'année précédente</li> <li>- Renforcer et développer les canaux de communication ainsi que l'action des ECS</li> <li>- Adapter le guide P.E.C à domicile dans les langues nationales</li> </ul>	<p>ANAYSE SITUATIONNELLE FINALE</p> <p>CONCEPTION ET ELABORATION D OUTILS</p> <ul style="list-style-type: none"> <li>- Continuer d'élaborer et diffuser des messages en charge en fonction des résultats de l'année précédente</li> </ul>

➡	Project Year 1 ➡	Project Year 2 ➡	Project Year 3 ➡	Project Year 4 ➡	Project Year 5
	<p>les langues nationales</p> <p>DISPONIBILITE DES MEDICAMENTS ET DU SUPPORTS</p> <ul style="list-style-type: none"> <li>- Eduquer les populations pour les amener à prendre conscience qu'elles doivent disposer à domicile des médicaments de qualité.</li> <li>- Investiguer la disponibilité- secteurs public et privé (GMME)</li> <li>- Développer, tester et mettre en oeuvre intervention pour influencer la disponibilité dans le secteur privé</li> <li>- Formuler et mettre en oeuvre recommandations secteur public</li> </ul> <p>FORMATION RELAIS</p> <p>IEC Mobilisation Sociale</p> <ul style="list-style-type: none"> <li>- Impliquer le secteur privé pour des campagnes intensives de sensibilisation</li> <li>- Appuyer l'organisation des J.N. LUTTE C.P.</li> </ul>	<p>FORMATION RELAIS</p> <p>IEC Mobilisation Sociale</p> <ul style="list-style-type: none"> <li>- Impliquer le secteur privé pour des campagnes intensives de sensibilisation</li> <li>- Appuyer l'organisation des J.N. LUTTE C.P.</li> </ul>	<p>FORMATION RELAIS</p> <p>IEC Mobilisation Sociale</p> <ul style="list-style-type: none"> <li>- Impliquer le secteur privé pour des campagnes intensives de sensibilisation )</li> <li>- Appuyer l'organisation des J.N. LUTTE c.p</li> <li>- recyclage des relais</li> </ul>	<p>FORMATION RELAIS</p> <p>IEC Mobilisation Sociale</p> <ul style="list-style-type: none"> <li>- Impliquer le secteur privé pour des campagnes intensives de sensibilisation</li> <li>- Appuyer l'organisation des J.N. LUTTE C.P</li> <li>- Formation recyclage personnel selon les normes et protocoles</li> </ul>	<p>FORMATION RELAIS</p> <p>IEC Mobilisation Sociale</p> <ul style="list-style-type: none"> <li>- Impliquer le secteur privé pour des campagnes intensives de sensibilisation</li> <li>- Appuyer l'organisation des J.N. LUTTE CP</li> <li>- recyclage des relais</li> </ul>

## Composante 2: Le Traitement Approprié

➡	Project Year 1 ➡	Project Year 2 ➡	Project Year 3 ➡	Project Year 4 ➡	Project Year 5
COMPOSANTE 2: Traitement Approprié	<p><b>TRAITEMENT COMMUNAUTAIRE</b></p> <ul style="list-style-type: none"> <li>- Revue des expériences des distribution communautaires</li> <li>- Revue et récolte des données concernant recherche de soins</li> <li>- Développer , tester et diffuser des messages pour traitement à domicile</li> <li>- Développement et test d'une intervention de distribution communautaire (1,2)</li> </ul> <p><b>FORMATION SANITAIRE</b></p> <ul style="list-style-type: none"> <li>- développer interventions pour influencer traitement secteur informel</li> <li>- développer interventions pour influencer prescription et traitement secteur privé</li> <li>- investiguer pratiques secteur privé/publique (GMME)</li> <li>- adapter PCIME cours courte durée pour application dans secteur publique</li> </ul>	<p><b>TRAITEMENT COMMUNAUTAIRE</b></p> <ul style="list-style-type: none"> <li>- Application étendue de l' intervention de distribution communautaire</li> <li>- développer interventions pour influencer traitement secteur informel</li> </ul> <p><b>FORMATION SANITAIRE</b></p> <ul style="list-style-type: none"> <li>- continuer la formation secteur publique en PCIME</li> </ul>	<p><b>EVALUATION A MI- PARCOURS</b></p> <p><b>TRAITEMENT COMMUNAUTAIRE</b></p> <ul style="list-style-type: none"> <li>- Application étendue de l intervention de distribution communautaire</li> <li>- continuer de développer les intervention pour influencer traitement secteur informel</li> <li>- réaliser des activites de proximité au niveau des populations</li> </ul> <p><b>FORMATION SANITAIRE</b></p> <ul style="list-style-type: none"> <li>- Développer interventions pour influencer prescription et traitement secteur privé</li> <li>- Continuer la formation secteur publique en PCIME</li> </ul>	<p><b>TRAITEMENT COMMUNAUTAIRE</b></p> <ul style="list-style-type: none"> <li>- Application étendue de l intervention de distribution communautaire</li> <li>- continuer de développer les intervention pour influencer traitement secteur informel</li> <li>- réaliser des activites de proximité au niveau des populations</li> </ul>	ANAYSE SITUATIONNELLE FINALE

➡	Project Year 1 ➡	Project Year 2 ➡	Project Year 3 ➡	Project Year 4 ➡	Project Year 5
	<p>secteur publique</p> <ul style="list-style-type: none"> <li>- formation secteur publique en PCIME</li> <li>- <i>Prise en charge améliorée au niveau structures sanitaires (PCIME)</i></li> <li>- Engager le processus d' integration de la PCIME dans les écoles de formation</li> <li>- <i>Prise en charge améliorée au niveau communautaire</i></li> </ul> <p>SURVEILLANCE Appuyer la surveillance de routine de la résistance des PLASMODIA</p> <p>QUALITE</p> <ul style="list-style-type: none"> <li>- Revue des données disponibles et partager avec CP</li> <li>- Développer plan pour surveillance de routine des médicaments</li> <li>- Identifier source de matériaux de testing médicaments</li> </ul> <p>PLAIDOYER Pour révision des textes</p>	<p>SURVEILLANCE comparer régulièrement les rapports sur la qualité avec les rapports de la surveillance</p> <p>QUALITE</p> <ul style="list-style-type: none"> <li>- Former les agents dans la méthode de testing de qualité de médicaments</li> <li>- informer les institutions, organisations concernées sur les résultats</li> <li>- développer une campagne de sensibilisation communautaire concernant les produits de mauvaises qualité</li> </ul> <p>PLAIDOYER Assurer la supervision des</p>	<p>SURVEILLANCE <i>comparer régulièrement les rapports sur la qualité avec les rapports de la surveillance</i></p> <p>QUALITE</p> <ul style="list-style-type: none"> <li>- En collaboration avec OBC développer un système d'alerte rapide</li> </ul> <p>PLAIDOYER Assurer la supervision des</p>	<p>SURVEILLANCE comparer régulièrement les rapports sur la qualité avec les rapports de la surveillance</p> <p>QUALITE</p> <p>-Continuer des activités de controle de qualité</p> <p>PLAIDOYER Assurer la supervision des</p>	

➡	Project Year 1 ➡	Project Year 2 ➡	Project Year 3 ➡	Project Year 4 ➡	Project Year 5
	réglementant le traitement à différents niveaux	activités au niveau domicile par les E.C.S	activités au niveau domicile par les E.C.S	activités au niveau domicile par les E.C.S	

## IR 2: Augmenter l'Accès et l'Utilisation d'un Paquet de Paludisme Prénatal

Category ➡	Project Year 1 ➡	Project Year 2 ➡	Project Year 3 ➡	Project Year 4 ➡	Project Year 5
COMPOSANTE 3: PRENATALE	<p>MOUSTIQUAIRES IMPREGNEES D INSECTICIDES (MII)</p> <p>ETAT DES LIEUX DISTRIBUTION DE MEDICAMENTS</p> <ul style="list-style-type: none"> <li>- évaluation de l approvisionnement/distribution de I.P.T pour les services CPN à travers les dépôts (central et régions)</li> <li>- évaluer la possibilité de distribuer les MI à travers les CNP</li> <li>- détaxation des I.T.N.</li> <li>- assurer la disponibilité des moustiquaires imprégnés dans les services de santé</li> <li>- intégrer la prescription de la M.I.I à chaque femme vue pour la première fois</li> </ul> <p>OFFRE DE SERVICE DE QUALITE</p> <ul style="list-style-type: none"> <li>- Faire une analyse situationnelle de la Prévention et la PEC du Paludisme S/C femme enceinte</li> <li>- Plaidoyer pour l</li> </ul>	<p>QUALITE</p> <p>-Evaluer la qualite de la prise en charge du Palu grave dans les maternités</p>	<p>EVALUATION à MI-PARCOURS</p> <ul style="list-style-type: none"> <li>- Evaluer la qualité des services prénataux ( mi-parcours)</li> <li>- Evaluer des campagnes de sensibilisation</li> <li>- Evaluer l'approvisionnement/ distribution de IPT pour les services CPN à travers les dépôts (centraux et régionaux)</li> </ul> <p>FORMATION</p> <ul style="list-style-type: none"> <li>- Formation des matrones/accoucheuses traditionnelles (IEC, suivi traitement – préventif et curatif</li> </ul> <p>QUALITE</p> <p>-Rendre beaucoup plus accessible les CPN par des activités en strategies avancées</p>		EVALUATION FINALE

Category ➡	Project Year 1 ➡	Project Year 2 ➡	Project Year 3 ➡	Project Year 4 ➡	Project Year 5
	<ul style="list-style-type: none"> <li>intégration de COPE dans tous les services C.P.N</li> <li>- I.P.T dans le SECTEUR PRIVE (Evaluation)</li> <li>- Concevoir un paquet de plaidoyer pour l'accès aux services</li> <li>- Evaluer la disponibilité actuelle en information concernant les blocages au niveau de la C.P.N</li> <li>- Reviser les normes et protocoles en SR =&gt; (CPN/accouchement) (intégrer les nouvelles données sur la prévention et la prise en charge du Palu)</li> <li>- Disseminer les normes et protocoles SR révisés</li> <li>- Evaluer l'efficacité des campagnes de sensibilisation</li> <li>- Expérience pilote pour former le secteur privé à l'utilisation S.P</li> <li>- Contrôle qualité médicaments/surveillance efficacité traitement</li> <li>- Assurer une disponibilité du médicament au niveau des structures sanitaires</li> <li>- Assurer la sensibilisation sur le Paludisme dans les services conseils prénatals et maternité</li> <li>- Campagne de</li> </ul>				

Category ➡	Project Year 1 ➡	Project Year 2 ➡	Project Year 3 ➡	Project Year 4 ➡	Project Year 5
	<p>sensibilisation a travers les medias surtout radio et télévision</p> <ul style="list-style-type: none"> <li>- Monitorer la CPN PEC/PALU tous les 6 mois</li> <li>- Superviser les activités (CPN et PEC dans les CAs</li> </ul> <p>POLITIQUE MEDICAMENTS</p> <ul style="list-style-type: none"> <li>- Revue litteraire sur l' utilisation SP dans les C.P.N</li> <li>- Tester l utilisation S.P. dans les sites sentinelles</li> </ul> <p>PLAIDOYER/IEC</p> <ul style="list-style-type: none"> <li>- élaborer des supports IEC/CCC/Mobilisation Sociale/Plaidoyer</li> <li>- élaborer un plan d intervention en CCC ciblant les Ado/Jeunes femmes au niveau de privé</li> <li>- Introduction COPE (autoévaluation qualité des services dans les PPS CPN)</li> <li>- Utiliser le « Paquet plaidoyer pour la promotion des services chez les adolescents</li> <li>- Mener activités de sensibilisation IEC</li> </ul>	<p>POLITIQUES MEDICAMENTS</p> <ul style="list-style-type: none"> <li>- Revue litteraire sur l' utilisation SP dans les C.P.N</li> <li>- Tester l utilisation S.P. dans les sites sentinelles</li> </ul> <p>PLAIDOYER/IEC</p> <ul style="list-style-type: none"> <li>- Conférence sur utilisation S.P. dans les C.P.N</li> <li>- plaidoyer pour l'intégration de COPE dans tous les services CPN</li> <li>- Utiliser le « Paquet plaidoyer pour la promotion des services chez les adolescents</li> <li>- Mener activités de sensibilisation IEC</li> <li>- Rendre beaucoup plus accessible les CPN par des activités en strategies avancées</li> </ul>			

## Composante 4: Les Moustiquaires Impregnées d’Insecticide

➔	Project Year 1 ➔	Project Year 2	Project Year 3 ➔	Project Year 4 ➔	Project Year 5
Composante 4 : MII	<p>RECHERCHE</p> <ul style="list-style-type: none"> <li>- Opérations recherche sur des méthodes alternatives diverses pour cibler les MII destinées aux pauvres en milieu rural et les femmes enceintes avec les secteurs privé, public et les ONGs</li> </ul> <p>LA COLLABORATION</p> <p>Avec les secteurs privés et public au niveau des zones de l’étude de base</p> <p>COUVERTURE</p> <p>Accès géographique</p> <p>Distribution Nationale des Produits MII et les matériaux de retraitement par les canaux commerciaux</p> <p>PROMOTION</p> <p>Génération de la promotion demande : concevoir pre-tester et lancer multiples campagnes avec messages synergique par tous les secteurs</p> <p>MARKETING</p> <p>Utilisation appropriée conception et exécution d’un plan « Marketing par</p>	<p>LA COLLABORATION</p> <p>Surveillance avec l’OMS sur l’efficacité des MIIs</p>	<p><i>EVALUATION</i></p> <p><i>A MI- PARCOURS</i></p> <p>RECHERCHE</p> <ul style="list-style-type: none"> <li>- évaluer le pourcentage des MII subventionnées destinées au secteur privé</li> <li>- diffusion des résultats avec recommandations/adoption de gouvernement</li> </ul> <p>COUVERTURE</p> <p>Augmenter les points de vente (10 districts de plus)</p> <p>PROMOTION</p> <p>Raffinement des approches et expansion</p> <p>MARKETING</p> <p>Renouvellement du plan de marketing et d’autres compagnies</p>		<p>ANAYSE</p> <p>SITUATIONNELLE</p> <p>FINALE</p>



➡	Project Year 1 ➡	Project Year 2	Project Year 3 ➡	Project Year 4 ➡	Project Year 5
	<p>NetmarK »</p> <p>ENVIRONNEMENT LEGAL</p> <ul style="list-style-type: none"> <li>- Plaidoyer pour une élimination des taxes et droits de douanes</li> <li>- Introduction des MII à bas prix</li> </ul>				

## Annex 4. Meetings with BASICS II *Paul Ickx*

### *1) General*

The purpose of this two-day meeting was to prepare a five-year plan for each CA involved in the broad BASICS II plan for malaria in Senegal. A more detailed one-year plan outlining each activity was expected together with a budget. USAID will prepare a Modified Acquisition and Assistance Request Document (MAARD) as a result of this meeting reflecting the contribution of each CA.

BASICS II is carrying out a literature review to identify and evaluate studies carried out on treatment seeking behavior for malaria in Senegal, which was discussed with MoH and other partners. BASICS II will also try to obtain data from the DHS survey last carried out in 1999 from Macro International in USA.

In the Ministry of Health the person coordinating USAID activities is Colonel Ndoeye. Various districts are “assigned” to organizations for health activities for example, USAID has 29 operational districts in 10 regions, UNICEF is operational in one district and WHO is carrying out IMCI in one district.

### *2) Re : DMCI collaboration:*

BASICS state that their priority countries in terms of IMCI related activities are Senegal and Uganda, with Nigeria and Ghana to a lesser degree. Nigeria will possibly become a “malaria plus up” country next year. It is also however important to consider continuing DMCI activities in the LAC region, according to BASICS as that is where DMCI started. This will be followed up further for potential inclusion in the year 3 child survival workplan.

### *3) BASICS WARO & Senegal: Colette Geslin, Paul Ickx, Aboubacry Thiam, Hadiatou Barry.*

Several meetings were held to arrange logistics re DMCI training sessions.

Five countries were confirmed to participate in the regional workshop: Senegal, Guinea, Mali, Niger, Haiti.

In Senegal at MOH level only the director of SNAN (Service National de l’Alimentation et de la Nutrition), under which IMCI activities fall, is informed, thus there is a need to involve a wider group of people from MoH ( eg in the PNA, the DPM, the Traditional and private medicine service etc) . A letter will be sent out to these people informing them of the intention and then personal visits to each individual by BASICS Senegal staff. A meeting is planned for 10<sup>th</sup> July to discuss with this group, the objectives and research questions, the indicators, sampling and data collection, the applications of the findings etc.

The national survey will only be carried out in the 6 regions where USAID is operational, 2 of these have had IMCI implemented, 4 do not. 1 district will be taken from each including the capital as one.

The survey is hoped to study drug availability and use:

- In the public sector (PNA, PRA, depot de district, centre de santé, post de santé and case de santé).
- In the formal private sector:- pharmacies, cabinets, clinics (to be added to DMCI if possible as only includes pharmacies currently)
- In the informal private sector: traditional healers, itinerant drug sellers ( to be studied if possible at same time as DMCI)

A full time person is needed to coordinate all the preparatory activities and the survey. An assistant coordinator may also be needed. The meeting with MoH people can help to identify candidates as well as to confirm the profile. This coordinator should be the person to collect all the background data to inform the survey (see table 2 & 3 in the manual)

A second meeting was held with BASICS as a meeting of the “Core group of the IMCI workgroup”. The director of SNAN (Prof Gelaye) was present at the meeting and gave his consent in principle to proceed with the DMCI study. Prof Gelaye was interested to know the results in other countries and how DMCI influenced policy or programming in other countries. A task list for the preparation of the survey had been drawn up by Colette and was approved.

Points still to be discussed/arranged:

- Travel of JB
- For the regional workshop: participants profiles/ identification Colette to contact AFRO people
  - Invitations
  - Budgeting for their transport & per diems (who pays for what)
  - Identify facilitators of workshop
  - Materials and venue for workshop
- For Senegal training: identify coordinators
  - Identify data collectors (numbers) & the supervisors
  - Data entry person
  - Budget (who pays for what)
  - Letters of authorization for survey
  - Invitations
  - Sampling sites
  - Tracer list
  - Facilitators for training
  - Venue and materials
- Survey sites
  - Logistics- transport, forms, letters, money for purchases etc.

## **Annex 5: Meeting with Aventis**

### *Manufacturers of Nivaquine® (chloroquine) and Paluject® (quinine)*

The pharmaceutical system and distribution was described in very general terms. There are three main pharmaceutical distributors: Laborex, Cofas(?) and Sodipharm(?) which supply approximately 59%, 25% and 16% of the private sector.

The public distribution chain: PNA (“Pharmaceutique National d’Approvisionnement”) supplies regional stores (PRAs) who then sell to the district depots who sell on to the hospitals and other facilities.

The Private distribution chain: A wholesaler supplies peripheral pharmacies (“officines”, of which there are 400 in Senegal, 200 of which are in Dakar) that function both as retail outlets and suppliers to private enterprises (clinics etc).

There has been an estimate that of all pharmaceutical products in the country, 3% are generic, but Aventis felt this was an underestimate. It was estimated that of the pharmaceutical sector, the public accounted for 15-20% and the private for 75-80%, 20% being the informal private sector. The parallel market is supported by a religious activist group based in Touba and is a strongly operational sector

Of the total market for anti-malarials, it was estimated that chloroquine constitutes 50%, Quinine 40% Artemisinin products 5-10% and Camoquine® (amodiaquine) and Fansidar® (SP) the remaining 5%.

Resistance to chloroquine is estimated by Aventis at 16%.

The average cost of Nivaquine® is 1200CAF/ 20 tabs of 100mg, whereas chloroquine generic costs 10 CAF/tablet of 150mg. The existence of two dose formulations of chloroquine tablets causes complicated dosing regimens.

A study called OPTIMAL (“Utilisation optimisée des moyens actuels de lutte contre la malaria”) was carried out in Côte d’Ivoire by Aventis. This consisted of a Knowledge Attitude and Practice survey, a survey of case management by health care professionals and a quantitative study in pharmacies (copy available). A similar study was carried out in Senegal of acute respiratory infections (we are trying to get a copy).

**Annex 6:**  
**Meeting with WHO/RBM**  
*Dr Bakary Sambou*

In Senegal, malaria accounts for 35% of all outpatient attendances.

There are eight sentinel sites for monitoring antimalarial resistance in Senegal: Dakar, Touba, Richard-Toll, Kaolack, Belengara, Zinguinchor, Kédougou, Kidira and Linguère/Kebimir.

Clinical resistance:

Zinganchor: 6%

Richard-Toll: 13%

Tamabacounda: 12%

Kaolack: 17% (same in Dakar)

Resistance is tested in two sites every two years. SP has not been tested yet as chloroquine is still effective and there have been no reports of failure to SP.

Senegal organised the first consensus meeting to adopt the RBM strategy in July 1999. This meeting was an opportunity to widely inform partners on the initiative and its various aspects including the NMCP activities, evaluation results and study results.

A number of RBM actions have taken place:

- Participation of partner organization such as UNICEF, USAID to the development of the strategic plan of RBM.
- Involvement of health regions and operational levels
- Consensus to form a close collaboration with IMCI
- Contribution of other partners outside WHO and government to finance RBM activities
- Participation at the Abuja summit (April 2000)
- The development of a strategic plan of RBM with consensus among partners
- A round table of all parties to discuss principles of RBM and funding of the implementation of the strategic plan (March 2001).

The 5-year strategic plan (2001-2005) outlines the resource envelope required to fund the PNLP.

The urban/rural ratio in Senegal is 40/60. Much of the population in the urban areas seek treatment in the private sector (formal and informal), while those in the rural areas primarily seek treatment in government or public health facilities.

### **Health Care Infrastructure**

The PNA distributes drugs to the public sector and the private sector. The PNA does not pay tax on imported drugs. The chloroquine available through the public sector is of 100mg strength, while in the private sector, 100mg and 300mg are available. It is estimated that the total market

for essential drugs through the public and private sector combined is CFA 15million per year. WHO/RBM are evaluating SP for IPT in 2-3 USAID/MSH districts.

The drugs in Senegal are mostly from Europe (France, Germany, Switzerland). There is one Senegalese manufacturer, Sipoa which manufactures chloroquine and quinine among other generics. Sipoa is used to fill in gaps in procurement by PNA. The price of drugs from Sipoa are generally higher than those imported. PNA procures drugs by international competitive tender once every two years. The legislative and regulatory pharmaceutical body is the DPM (Direction de la Pharmacie et Medicaments). They have two inspectors who enforce the regulation and identify the drugs circulating without registration. Quality control is carried out by the "Laboratoire de Controle de Medicaments". Last year the government tried to enforce a policy whereby certain essential drugs such as antimalarials be sold at cost price during the malaria season. However, this was not followed and antimalarial drugs obtained from the PNA are now sold at a profit of 20%. The same profit margin is used by the private sector if they obtain drugs from PNA. All the drugs used in the public sector are generic. For other drugs obtained from the PNA, a margin of 15-50% is added.

Each district, hospital and health facility has a drug budget. 70% of expenditure on drugs is funded by the "Comité de santé" through a "mutual", a form of pre-paid health insurance. The MoH provides 30-40%.

Before 1992, there were major problems in distribution. In 1992, the PNA underwent restructuring and partners (EU, World Bank, USAID and other partners) gave the PNA an initial stock of essential drugs.

The structure of the peripheral health facilities is as follows:

Districts

Comité de Santé (CS)

Poste de Santé (PS)

The PS generally has one nurse and one health worker and is run by the village health committee. Every village has a representative in the health committee as well as having a representative from the women's group and other important social groups. Each PS was given CFAF 800,000 to begin the system. This Bamako Initiative system began in 1992 by UNICEF. The first districts to implement the system were Bignona, Podor and Matam. In one district there are about 40 PS and one hospital. In the district of Podor, the comité pays for the salaries of nurses in 10 of the 40 PS. The system is monitored every six months.

## **Annex 7:** **Maternal Health and Family Planning Project of MSH**

*Donna Shopel, Antoine Ndiaye and Ousmane Faye*

During this meeting, Antoine outlined in brief the MHFP project. The interesting aspect for RPM Plus is the supply of contraceptives and reproductive commodities. This is to be integrated into the national supply network through the PNA system. It is currently being tested in 2 of 10 regions in the country and an evaluation will take place later this year to determine the feasibility of integrating the supply in all regions. Attached to the integration of supplies is the initiation of cost recovery of contraceptives. This will also be evaluated, a baseline was carried out in early 2000 (copy available). The potential problems are the weaknesses in the PNA system and that there is poor quantification, not based on consumption, at all levels. The PNA supplies the regional stores (PRAs) by transfer of stock. There are six PRAs covering the ten regions, four covering two regions each.

Drugs are divided into three classes:

Class A- poisonous drugs including antibiotics

Class B – Controlled drugs.

Class C- drugs available on a repeat basis after a first prescription: antihypertensives etc. and includes antimalarials

A major problem in Senegal is the data collection strike, which has just ended. There has been no reporting of any statistics since 1997.

Some areas of potential collaboration were identified to be explored further:

- Work on assessing the PNA distribution system . If problems are identified through the MSH evaluation and the proposed DMCI survey, there is possibility of working together MSH and RPM plus to strengthen the distribution system through combined technical assistance.
- With the work of the MHFP project of MSH on cost recovery of contraceptives, there may be a use for the Cost estimate strategy (CES) tool, this is open for further exploration.

## **Annex 8: USAID Meeting Participant List**

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## Annex 10: Documents Collected

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8. Evaluation de Base sur le Projet Pilote de l'Integration et le Recouvrement de Coûts des Contraceptives. (2000)
9. Handouts from USAID workshop:
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  - BASICS – Assistance du projet BASICS II au Senegal pour la survie de l'enfant (2000-2004). Role dans la lutte contre le Paludisme.
  - ADEMAs- Le marketing social: interventions de ADEMAs au Senegal
10. PNA. Module de formation sur la gestion des médicaments  
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